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## **CLAIMS**:

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- 1. A bone marker for use in image guided surgery, comprising a support having an anchor mechanism for anchoring the support in a bone, the bone marker further comprising at least one reference member detectable by an image guided system, the at least one reference member being attached to the support, in which the support comprises at least one limb which is resiliently deformable.
- 2. A bone marker as claimed in claim 1, in which the support further comprises at least one limb which is rigid.
- 3. A bone marker as claimed in claim 1, in which a resiliently deformable limb comprises a tightly wound helical spring.
  - 4. A bone marker as claimed in claim 3, in which the abutting surfaces of the wire are flat.
  - 5. A bone marker as claimed in claim 1, in which a resiliently deformable limb is made from a damped elastomer.
- 6. A bone marker as claimed in claim 1, in which a resiliently deformable limb is made from a shape memory alloy.
  - 7. A bone marker as claimed in claim 1, in which the ratio of the outer diameter of a resiliently deformable limb to its inner diameter is at most 3:1.
  - 8. A bone marker as claimed in claim 1, in which the anchor mechanism comprises at least one fixation member for anchoring the bone marker in the bone, and a coupling member for coupling the support to the fixation member.
    - 9. A bone marker as claimed in claim 8, in which the coupling member is adjustable to allow rotation of the support about the fixation member.

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- 10. A bone marker as claimed in claim 8, in which the at least one fixation member is a threaded screw.
- 11. A bone marker as claimed in claim 10, in which the diameter of the threaded screw is not more than about 2 mm.
- 5 12. A bone marker as claimed in claim 1, in which the reference members transmit signals.
  - 13. A bone marker as claimed in claim 1, in which the reference members reflect signals.
  - 14. An image guided surgery system which comprises:

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- a. a bone marker as claimed in any of the preceding claims,
- b. a processing system for calculating the position of the reference members and a location on the bone relative to the position of the reference members,
- c. an actuation system for moving an apparatus to a location calculated by the processing system.